

<b>Notice of Allowability</b>	Applicant No.	Applicant(s)
	10/042,195	AKABORI ET AL.
	Examiner	Art Unit
	Thu Nguyen	3661

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to Amendment filed on March 23, 2004.
2.  The allowed claim(s) is/are 1-14.
3.  The drawings filed on 11 January 2002 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 3/12/04.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Prior arts of record does not disclose an adaptive cruise control system for an automotive vehicle set forth in the independent claims 1 and 14 in which the delay providing section provides a delay for the velocity of the vehicle or the preceding vehicle, the delay is provided independent from any inherent delay in the vehicle velocity detection section; the delayed detected velocity is used to set the target inter-vehicle distance. Claim 13 teaches a method for use in adaptive cruise control of an automotive vehicle similar to the system of claim 1 and 14.

Tamatsu (US 6,317,073) teaches a velocity delay providing section Dv in col.18, lines 1-3. However, the delay providing section of Tamatsu is different from the delay providing section of the present application because whereas the delay providing section Dv of Tamatsu is provided to compensate the lag between the pulse generator and the speed sensor; the delay providing section of the present application does not concern compensating the lag caused by signal transmission or processing delay (the "inherent delay") in the vehicular velocity detecting section. The delay of the present application actually adds more delay to the measured velocity that is outputted from the vehicular velocity detecting section (after all lag phenomena have been compensated). The delay providing section taught by Tamatsu is meant to compensate for "inherent" delay in the vehicle velocity detection section. In contrast the delay providing section of the present invention just adds more delay for adjusting timing of the vehicle control such as control of brake, etc. By adding such the delay to the detected velocity as taught by the present invention, the target inter-vehicle distance will be longer than the actual target inter-vehicle

distance when the target vehicle decelerates, whereas the distance detected from the inter-vehicle distance detecting section is shorter due to the deceleration of the target vehicle. The change of the target inter-vehicle distance due to the added delay accordingly effects the earlier or later braking time, this adjusted braking time improves assurance of safety to the driver. The added limitation "independent from a delay inherent in said vehicle detection section" emphasizes that the delay providing section is used for adding more delay to the velocity without considering "inherent delay" caused by signal transmission or signal processing inside the vehicular velocity detection section.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (703) 305-8233. The fax phone number for this Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



**THU V. NGUYEN  
PRIMARY EXAMINER**

May 27, 2004